

Claims

1. An electrical connection element for providing a ground connection between a printed circuit board and an electronic equipment chassis, comprising:

a connection element having at least one spring contact assembly for removably receiving and holding a printed circuit board inserted thereinto, such that the circuit board can be inserted and removed by hand, wherein the connection element includes a portion thereof which is configured to be directly attached to the electronic equipment chassis, and wherein insertion of the printed circuit board into the spring contact assembly results in a direct electrical connection between a circuit ground on the printed circuit board and the equipment chassis when the connection element is operatively attached to the equipment chassis.

2. The connection element of claim 1, wherein the connection element is permanently securable to the equipment chassis.

3. The connection element of claim 1, wherein the connection element includes a trough portion which fits around a bottom edge of a side wall portion of the chassis, so that when the end portion of the chassis is secured to the side wall, the connection element is captured therebetween.

4. The connection element of claim 1, wherein the spring contact assembly includes two elongated elements with ear portions near the top thereof and extending toward each other, wherein an elongated members and the ear portions are configured so as to hold an inserted printed circuit board in a spring-pressure relationship.

5. The connection element of claim 3, wherein the trough member includes two longitudinal side walls, with the spring contact extending upwardly from one of the longitudinal side walls, and wherein the connection member further includes a small center tab which extends inwardly of the trough at an angle to the spring contact assembly, the tab being used to accurately locate the

connecting element relative to the chassis by mating with a selected portion of the chassis.

6. The connection element of claim 1, wherein the side wall of the trough from which the spring contact assembly extends angles inwardly of the trough, thereby providing a preload capability which presses the spring contact assembly against the chassis side wall when the connection element is operatively installed in the chassis.

7. The connection element of claim 1, wherein a bottom portion of the trough includes at least one small extension which makes good electrical contact between the connection element and the instrument chassis.

8. The connection element of claim 1, including a plurality of spring contact assemblies for receiving and holding printed circuit board thereinto, wherein the spring contact assemblies are spaced so as to be in registry with printed circuit guides on the wall of the electronic instrument.